

Warm Up # 8- 2

Draw a Venn Diagram to represent each situation:

1. All the kids at summer camp left something at home. 11 forgot their towel and 23 forgot their hat. Out of 30 campers, how many had neither a towel nor a hat?

2. In a car club, 13 drive a manual and 15 have a sunroof. 5 have manual cars with a sunroof and 4 have neither.

- How many are in the club?
- How many drive a manual without a sunroof?
- How many do not drive a manual?

HW Questions: p. 228

REVIEW SET 7A

- If $S = \{x \mid 2 < x \leq 7, x \in \mathbb{Z}\}$:
 - list the elements of S
 - find $n(S)$.
- Determine whether $A \subseteq B$ for the following sets:
 - $A = \{2, 4, 6, 8\}$ and $B = \{x \mid 0 < x < 10, x \in \mathbb{Z}\}$
 - $A = \emptyset$ and $B = \{x \mid 2 < x < 3, x \in \mathbb{R}\}$
 - $A = \{x \mid 2 < x \leq 4, x \in \mathbb{Q}\}$ and $B = \{x \mid 0 \leq x < 4, x \in \mathbb{R}\}$
 - $A = \{x \mid x < 3, x \in \mathbb{R}\}$ and $B = \{x \mid x \leq 4, x \in \mathbb{R}\}$

3 Find the complement of X given that:

a $U = \{\text{the 7 colours of the rainbow}\}$ and $X = \{\text{red, indigo, violet}\}$

b $U = \{x \mid -5 \leq x \leq 5, x \in \mathbb{Z}\}$ and $X = \{-4, -1, 3, 4\}$

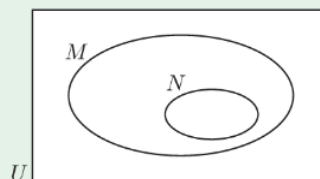
c $U = \{x \mid x \in \mathbb{Q}\}$ and $X = \{x \mid x < -8, x \in \mathbb{Q}\}$

4 On separate Venn diagrams like the one alongside, shade:

a N'

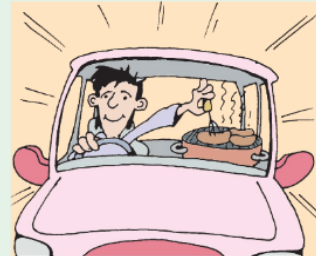
b $M \cap N$

c $M \cap N'$



- 7** A school has 564 students. During Term 1, 229 of them were absent for at least one day due to sickness, and 111 students missed some school because of family holidays. 296 students attended every day of Term 1.
- Display this information on a Venn diagram.
 - Find how many students:
 - missed school for both illness and holidays
 - were away for holidays but not sickness
 - were absent during Term 1 for any reason.

- 8** The main courses at a restaurant all contain rice or onion. Of the 23 choices, 17 contain onion and 14 contain rice. How many dishes contain both rice and onion?
- 9** 38 students were asked what life skills they had. 15 could swim, 12 could drive, and 23 could cook. 9 could cook and swim, 5 could swim and drive, and 6 could drive and cook. There was 1 student who could do all three. Find the number of students who:
- could only cook
 - could not do any of these things
 - had exactly two life skills.



Probability - Chapter 9

$$0 < P < 1$$

Classwork: Find and write down the definition of the following vocabulary from pgs. 258-259.

Do p. 260 # 2 & 3

chance/likelihood

impossible

certain

number of trials

outcomes

frequency

relative frequency

Experimental Probability

HW: Rev. Set 7B

p. 229 # 1 - 6, 10

